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JAN 11 1996

FEDERAL COMMUNICATIONS COMMISSION

0429

January 11, 1996

**VIA HAND DELIVERY**

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
Room 222  
1919 M Street, N.W.  
Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL

Re: WT Docket 95-157

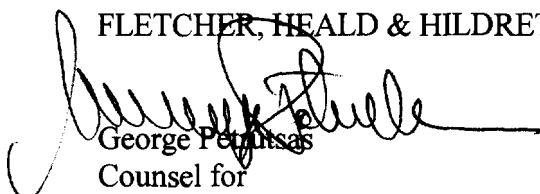
Dear Mr. Caton:

On behalf of the Fixed Point-to-Point Communications Section, Network Equipment Division of the Telecommunications Industry Association ("TIA"), we are filing an original and nine (9) copies of its Reply Comments in the above-referenced rule making proceeding.

Please communicate with us if additional information is desired.

Very truly yours,

FLETCHER, HEALD & HILDRETH, P.L.C.

  
George Petrutsas  
Counsel for

Fixed Point-to-Point Communications  
Section, Network Equipment Division  
of the Telecommunications Industry  
Association

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BEFORE THE  
**Federal Communications Commission**

WASHINGTON, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
COMMUNICATIONS SECTION

In the Matter of

Amendment to the Commission's Rules	)	WT Docket No. 95-157
Regarding a Plan for Sharing the Costs of	)	RM-8643
Microwave Relocation	)	

Directed to: The Commission

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**REPLY COMMENTS**

Pursuant to Section 1.415 of the Commission's Rules, the Fixed Point-to-Point Communications Section, Network Equipment Division of the Telecommunications Industry Association ("TIA"), hereby submits its Reply Comments in the above-captioned proceeding. In that proceeding, the Commission proposes a plan for microwave facility relocation cost-sharing to facilitate clearance of the 2 GHz band, which has been reallocated for personal communications services ("PCS").

TIA filed comments in the proceeding supporting the Commission's cost-sharing proposal. It offered to work with PCS and microwave licensees, with their representatives, and with the Commission in developing standards needed to implement the cost-sharing rules to be adopted in the proceeding. In addition, TIA pointed out the seriousness of the adjacent channel interference problem and expressed its concerns about the Commission's proposal to exclude adjacent channel interference as a factor in determining cost-sharing requirements. TIA urged the Commission to adopt TIA's Bulletin TSB 10 as the standard for determining PCS-to-microwave interference. TIA also asked the Commission to clarify its proposal concerning replacement of analog systems with the "lowest cost" digital systems, and to make STA readily

available during the microwave relocation process.

TIA reaffirms these comments and suggestions, with one exception. If the parties agree, TIA would have no objection to the use of the “proximity threshold” recommended by several parties, which uses co-channel objectives, as long as this approach is used only for cost sharing purposes. TIA, as a technically expert organization, re-emphasizes the importance of making adjacent channel interference a factor in determining whether an incumbent microwave facility should be relocated.

Finally, TIA urges the Commission to recognize the need for fair treatment of incumbent microwave licensees during the relocation process.

Adjacent Channel Interference Must Be  
Taken Into Account for Determining  
Whether Microwave Facility Must Be Relocated

Several parties<sup>1</sup> have suggested that only co-channel interference should be considered for determining the relocation costs to be shared. They argued that using adjacent channel interference to help determine relocation costs would add complexity to the process and increase disputes, without offsetting benefit to the PCS relocater.<sup>2</sup> They also argued that adjacent channel interference cannot be measured well enough to allocate, with reasonable accuracy, costs among benefited parties.<sup>3</sup>

TIA has no objection to disregarding potential adjacent channel interference for this

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<sup>1</sup>See, for example, *GTE*, pp. 7-8; *PCS Prime Co.*, p. 8, *Sprint Telecommunications Venture* (“STV”) pp. 24-26; *Western Wireless Corp.*, pp. 8-9; *Pacific Bell Mobile Services*, p. 5; *Personal Communications Industry Association* (“PCIA”), pp. 30-31.

<sup>2</sup>*STV Comments*, p. 26; *PCIA Communications*, p. 32.

<sup>3</sup>*Western Wireless Corp.*, pp. 8-9.

limited purpose of calculating relocation costs. However, adjacent channel interference is a serious problem and must be taken into account in determining if a microwave facility is to be relocated. Such interference is a well-understood problem in the microwave service. Methods for dealing with adjacent channel interference exist, are well accepted, and they are detailed in Bulletin 10-F (the current version of Bulletin 10) and in TIA's draft Bulletin 10-G, a copy of which was provided with its comments. Therefore, the Commission should make clear that, although adjacent channel interference need not be taken into account for cost-sharing purposes, incumbent microwave licensees continue to be entitled to protection from adjacent channel interference caused by PCS systems.

**“Proximity Threshold” Approach is Acceptable,  
But Only For Cost-Sharing Purposes**

Other comments<sup>4</sup> have urged the Commission to permit the use of the “proximity threshold”<sup>5</sup> approach, instead of Bulletin 10, for cost-sharing purposes on the grounds that the proximity threshold approach is simpler, not technology specific, and would result in fewer disputes. Several other comments urged the Commission to stay with Bulletin 10.<sup>6</sup> After consideration of the comments on this issue, TIA would not object to the employment of the

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<sup>4</sup>See, for example, *AT&T Wireless Services*, pp. 7-9; *GTE*, pp. 5-7; *PCS PrimeCo*, pp. 8-9, 12-13; *STV*, p. 24.

<sup>5</sup>Under the “proximity threshold” approach, a rectangular area 15 miles wide and extending 30 miles beyond both nodes of a microwave path is established. Expenditures to relocate the incumbent microwave facility within that area would be shared among PCS licensees with operational base stations within that area. See, *STV*, p. 25; *AT&T Wireless Service*, p. 8.

<sup>6</sup>See, for example, Comments of *Pacific Bell Mobile Services*, p. 5; *Southwestern Bell Mobile Systems, Inc.* (“SBMS”), pp. 6-7; *U.S. AirWaves, Inc.*, pp. 5-6; *UTC*, p. 15; *Western Wireless Corp.*, pp. 7-8.

proximity threshold approach, but again, only for cost-sharing purposes.

TIA disagrees strongly with STV's argument, however, that TIA's Bulletin 10 is not an appropriate standard for determining interference.<sup>7</sup> While, as indicated above, the proximity threshold approach is acceptable to TIA for cost-sharing purposes, it is well-established that Bulletin 10 is the most appropriate, indeed, the only, widely recognized standard for determining PCS-to-microwave interference, as well as microwave-to-microwave interference. Thus, TIA urges the Commission to adopt it for that purpose.<sup>8</sup>

#### Incumbent Users Are Entitled to Fair Treatment

As deliberations proceed on the above-cited matter, the Commission is urged to take into account that most incumbent users acted in good faith and in compliance with then existing Rules. Investments in equipment of state of the art technology were made and operations were designed around the availability and capabilities of operational fixed microwave technology. Further, a large number of 2 GHz band microwave operations are serving the public interest in major ways, e.g., public agencies, pipelines, public utilities, and railroads.

Under these circumstances, the Commission should minimize the impact of PCS upon incumbent users. Most certainly, those incumbents should not be penalized by forcing them now to pay any part of the replacement costs, particularly when an existing system provides satisfactory service and would not be replaced, but for a mandated relocation to accommodate

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<sup>7</sup>STV, p. 24.

<sup>8</sup>TIA Bulletin 10 does not apply only to microwave-to-microwave system interference as some parties apparently assume. See, for example, *Southwestern Bell Mobile Systems, Inc.* ("SBMC"), p. 6. It is emphasized that TIA's Bulletin 10 applies equally well to PCS-to-microwave interference calculations, as it does for microwave-to-microwave interference determination.

other users.

As API and many other parties have noted in their comments,<sup>9</sup> digital technology is replacing analog in microwave communications systems. Indeed, digital has become the “standard” in the microwave industry. Unlike analog, digital systems are “intelligent” and to a large degree self-maintainable and more spectrum efficient than analog. Therefore, TIA shares API’s concerns that the replacement of an existing system by an analog facility, as the Commission has proposed, will subject the incumbent licensee to increasing operating and maintenance costs, for the reasons stated in API’s Comments,<sup>10</sup> e.g., lack of spare parts, replacement units, trained personnel.

TIA concurs with the views expressed by, among others, UTC, APCO, L.A. Sheriff of Tenneco, that replacement microwave systems should be consistent with and should reflect current, state-of-the-art technology.<sup>11</sup> Moreover, incumbent licensees also should not be required to accept a replacement facility without the expansion capacity of their existing facility.<sup>12</sup>

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<sup>9</sup>See, e.g., *Comments of the American Petroleum Institute* (“API”), pp. 13-14; *UTC, the Telecommunications Association* (“UTC”), pp. 25-27; *Wiltel Technology Ventures, Inc.* (“Wiltel”), p. 5; *Tenneco Energy* (“Tenneco”), pp.9-12; *Association of Public Safety Communication Officials* (“APCO”); pp. 3-7; *Los Angeles County Sheriff’s Department* (“L.A. Sheriff”), pp. 4-5.

<sup>10</sup>API, p. 14.

<sup>11</sup>*UTC*, p. 25, *APCO*, p. ; *L.A. Sheriff*, p. 4.

<sup>12</sup>In this connection, TIA does not agree with the suggestion of PCIA on page 3 of its Comments, that the public safety licensee of a microwave analog system with 600 voice channel capacity but utilizing two thirds of that capacity, or 400 voice channels, was unreasonable in not accepting an offer for a system with 16 T-1 capacity, or 384 channels. The offered replacement in that case, even an upgrade, would not provide the licensee with sufficient expansion capacity. In that situation, TIA believes that the request for a DS3, 6 GHz replacement system was not unreasonable.

Finally, TIA shares API's concerns<sup>13</sup> about relocating or replacing only links in an incumbent system that would be directly subject to interference from the PCS facility. As noted by API and as TIA pointed out in its Comments,<sup>14</sup> relocation or replacement of part of a system (particularly where an analog system is to be replaced by digital) could result in the unacceptable degradation of the remainder of the network.<sup>15</sup> Therefore, comparability may require replacements of more links than those directly interfered with.

### CONCLUSION

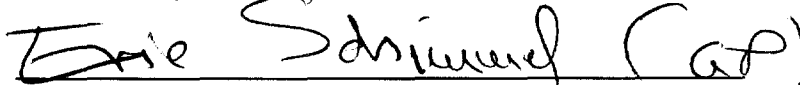
The Commission is urged to adopt its cost-sharing proposal but to incorporate in its decision TIA's suggestions and recommendations.

Respectfully submitted,

FIXED POINT-TO-POINT COMMUNICATIONS  
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OF THE TELECOMMUNICATIONS  
INDUSTRY ASSOCIATION

  
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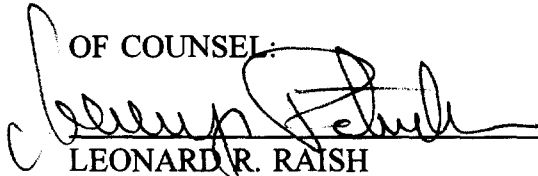
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<sup>13</sup>API, p. 22.

<sup>14</sup>TIA at 6-7.

<sup>15</sup>See also, *Association of American Railroads*, p. 7.

OF COUNSEL:

A handwritten signature in dark ink, appearing to read 'Leonard R. Raish', is written over a horizontal line. The signature is fluid and cursive.

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Date: January 11, 1996

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